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ABSTRACT

The purpose of this module is to help educators learn how to break down a goal into its directly observable component parts. These parts of the goal can then be used as evaluative criteria for measuring accomplishment of the goal. The procedure is a new method for operationally defining goals and is a specific application of a general method called the Hutchinson Operationalization of Fuzzy Concepts. This workbook has been designed for a "reading and doing" genre of learning. However, learners who prefer the "learning by listening and doing" method can select Option B--an audio cassette for use with an audio workbook. The Option B materials are not included, but can be ordered separately from the authors. (Author/WM)

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SELF-INSTRUCTIONAL MODULE FOR LEARNING THE HUTCHINSON METHOD OF OPERATIONALIZING A GOAL OR INTENT

by

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SELF-CONTAINED
WORKBOOK
(OPTION A)

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Produced under the
Direction of

Richard T. Coffing
and
James M. Cooper

School of Education
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HOW TO USE THE MODULE

The purpose of this self-instructional module is to help you learn how to break down a goal into its directly observable component parts. These parts of the goal can then be used as evaluative criteria for measuring accomplishment of the goal.

You, the reader, will not want to proceed further unless you believe your purposes coincide with the purpose of the module. As a guideline on whether to continue, you might ask yourself right now, "Do I, or does any decision-maker I work with, have a goal or an intention that I want to see accomplished by the program I am working on?" If your answer to that question is "No", then the module clearly is not for you.

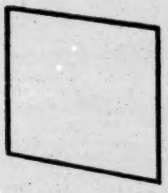
If your answer is "Yes," then ask yourself the question, "If I were to tell that goal to someone else and ask him to find out whether that goal was being accomplished, would he come back to me with the same information that I would bring back if I were checking on the goal?" If your answer to that question is "Yes", and if you can have the same thing happen for other goals too, then you probably do not need to study this module. But if the answer to that second question is "No", then the module is intended for you.

If you have decided now to study the module, there is still another question which you should ask yourself: "Given a choice, do I prefer to learn by reading and doing, or by listening and doing?" If you prefer to learn by reading and doing, then be sure you have possession of the "Self-contained Workbook (Option A);" you should use that workbook to learn the procedure. However, if you prefer to learn by listening and doing, then make sure you have both the "Audio Cassette for Use with Audio Workbook (Option B)" and the "Audio Workbook (Option B)." All the instructions you have read so far are identical for the two instructional alternatives, so you should check the cover now to be sure you have the materials for the option you prefer.

The procedure which you will experience during this self-instructional module is a new method for operationally defining goals. This is a specific application of a general method developed by Thomas E. Hutchinson, Associate Professor of Education, University of Massachusetts, which he calls "The Operationalization of Fuzzy Concepts," for reasons that will be obvious when you do the procedure.

When you have at least an hour to spend on the module, then continue reading these instructions--in the workbook which you have chosen to use. Whichever workbook you choose, be sure to proceed through it page by page, without pre-viewing, skimming or skipping. Experience has shown that exposure to the material without doing the procedure step by step can lose to the reader many of the benefits of this procedure.

When you are ready to begin, think of a goal or intention that you want to work with. It may be easiest for you to use the one which appears as the example in this module: "helping others." But you may choose your own if you wish; it should be one which has some importance to you and it should be "good and fuzzy," for purposes of learning the procedure. Write it down someplace. (Sometimes when the goal is not written down, it changes in the process of operationalization.) If your goal is not "helping others," then when the term "helping others" appears in the following pages you should substitute mentally the goal which you have written down.



The first step is to construct in your mind a hypothetical situation. This hypothetical situation should be as real and as complete as possible -- with people in it, furniture, a complete environment. It might be inside or outside; that doesn't matter. It should not be too specific -- a general hypothetical situation. Now, in this hypothetical situation a person is "helping others." In fact, this person is the epitome of "helping others." This person is the best that you can imagine that "helping others" could possibly be. What I want you to do is to examine the hypothetical situation, observe it very carefully, and write down all the things that you see about that person, about that person's interaction with other people, about the environment, about interaction between people and the environment, anything at all going on that would indicate to you that "helping others" is present, that the person really is "helping others". And just write them down on a list. Do this now on the next page.

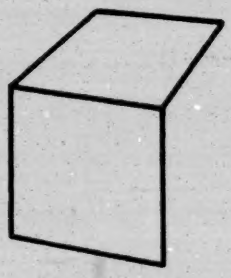
WRITE DOWN THE THINGS YOU SEE THAT INDICATE TO YOU THAT THE FUZZY CONCEPT IS PRESENT. Be sure to exhaust the hypothetical situation. Don't just put down the first two or three things that come to mind. Get everything out of it that you can.

WHEN YOU HAVE EXHAUSTED THIS PROCESS, PROCEED TO THE NEXT PAGE.

If you were trying to operationalize "helping others" completely, you would not move on to a second step until the first one had been completely exhausted, with everything out of it you could possibly get.

By the first step, you may have identified some of the dimensions you have for "helping others" at this first level of breakdown. As the early steps in

the procedure are completed, you will have found more and more of the dimensions; in later steps you may have more difficulty in finding others. You should not necessarily expect each of the later steps to elicit the same quantity of dimensions that you get at the first stage.



The second step of the procedure is to construct a second hypothetical situation. Again, it should be as complete as possible. There should be people; they should be doing things, interacting with each other; there should be a complete environment. It may be inside or outside. It should have anything you want to put into this environment -- except, in this hypothetical situation, there is no "helping others" going on at all. A complete absence of "helping others." What I want you to do is to examine this situation, observe it carefully and write down all the things you can see in this situation that indicate to you that "helping others" is absent. Don't just write down the negative ends of positve dimensions that you thought up in the first situation. Use the second hypothetical situation to identify a wider range of dimensions of "helping others" than you got from the first step. Use the next page to write your list.

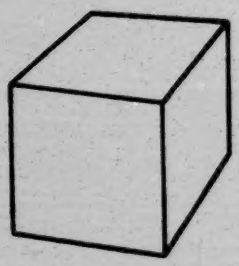
WRITE DOWN THE THINGS YOU SEE THAT INDICATE TO YOU THAT THE FUZZY CONCEPT IS ABSENT. Again, try to exhaust the situation; get everything out of it that is available in it.

WHEN YOU HAVE EXHAUSTED THIS PROCESS, PROCEED TO THE NEXT PAGE.

By doing the second step you may have identified some more of the dimensions

that you have for "helping others." With each succeeding step, there will be fewer left, and they will be harder and harder to find.

Some parts of the procedure will work better for you than others will. Also, for different fuzzy concepts, different aspects of the procedure will work better than others. For example, there are some fuzzy concepts where the negative hypothetical situation gets all the dimensions and the positive gets few; and there are others where the positive situation gets most of the dimensions and the negative gets few. So for that reason I advise against skipping any of the steps. Only when you have had enough experience with it for a large number of instances, is it safe to say that this particular part doesn't work for you. If some part doesn't work for you, then don't do it; but at first give it a good workout because, for example, if the first three times you use it, part two doesn't work, that doesn't mean that it won't work when the next fuzzy concept that comes along that you want to deal with. It may very well be the most important step for that one, so give it a good chance before you rule out any one of the steps for your own practice. But if you do get a consistent history of a certain step not doing anything for you, then obviously you should eliminate it.



The third step in the procedure is to get two or three other people to go through steps one and two, the positive and negative hypothetical situations, whereby they operationalize in part what they mean by "helping others" -- their dimensions for it. Then you take their lists and look at each item -- one by one -- and you ask yourself the following question, "Is this an item I want on my list; Is this a dimension that I have, really?" This is just another way of finding additional dimensions.

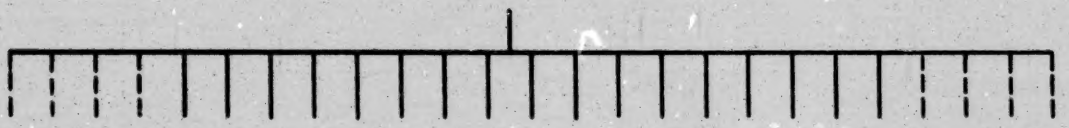
Of course there are a number of possibilities for each item on another person's list. You may already have it on your list. You may find one that you would really like to have, so you add it to your list. You may find one that is not on your list and you don't want it. In fact, you can't stand it. In fact, it makes you so angry that you think of two or three more of your own dimensions, and of course you add them to your list. The point is that you identify all the dimensions that you have for the fuzzy concept. You are not agreeing or disagreeing with the other people. You are using their lists as stimuli to yourself, so that you can consider each of their dimensions and say, "This is one of mine, but I didn't think of it before." Or you say, "This one is ridiculous -- it makes me think of three that I hadn't though of before," and so you add them. And of course the last possibility is that it's not on your list and you don't want it and it doesn't make you think of a blessed thing. Now review this last paragraph and do the procedure. (If there are no other people from whom you can get lists at this moment, then stop here temporarily until you are able to get them.) Use the next page in the workbook to record the additions to your list.

Do not discuss or justify your items. This procedure is designed to help you make your list as complete as possible, not to justify your list to anyone else.

ADDITIONS TO YOUR LIST BASED ON COMPARISON WITH OTHERS:

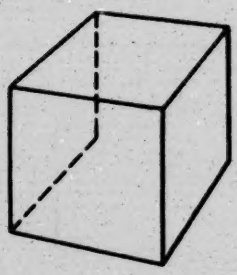
WHEN YOU HAVE FINISHED COMPARING LISTS, PROCEED TO THE NEXT PAGE.

By that last process, you may have found a few more. It can be quite rich.



One thing that might be mentioned is that it is desirable to pick people who do not think the way that you do -- why would you want to look only at your own dimensions? That would not help in terms of identification. So pick people who you think will give you some spread, because then you can better examine what your own spread is.

The purpose of the whole operationalization procedure is definitely not to eliminate fuzzy concepts. For one thing, if we had to communicate always at the dimension level, in order to say "hello" it would take a few volumes, and obviously we cannot manage to do that in everyday life. A fuzzy concept is a remarkable, convenient shorthand, although a lot of information gets lost in the process of creating and using one. It is advisable to be aware of this so that you lose less. It is not one of the purposes of the procedure to cause people always to use words precisely the same way, with the same set of dimensions. The process probably can be used, though, to help people get together.



The fourth step in the procedure is harder. In this step, what I want you to do is to go back to the original hypothetical situations you had before, conjure them up again, as it were, and I want you to look at them again because there were things going on in those hypothetical situations that you did not write down because at the moment you did not think that they were part of what you mean by "helping others." I want you to re-examine all the things that you can find in those original hypothetical situations that you did not put down, and seriously examine the implications of those things <u>not</u> being part of what you mean by "helping others."

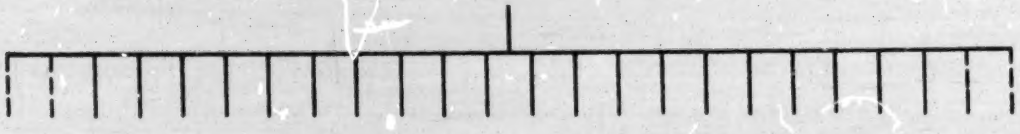
Here is an example, but it is out of the context of this particular fuzzy concept. Say, I am trying to operationalize someone's concept "success in a job," and he sees himself getting good money, but he does not write that down. It is not one of his listed dimensions of "success in a job." So I'll say to him, "Imagine that you had no money at all, ever;" and usually at that point he is prepared to say "Well, by not putting it down I didn't quite mean <u>that</u>. I need enough to exist and to live -- up to a certain point. After that, it is not important as a dimension of success in a job." So he puts it down and qualifies it: "Money up to $10,000/year" or whatever level is being thought about.

So in this step in the procedure you re-examine the hypothetical situations; you look at the things that are going on, and especially at the things you did not write down. You seriously examine the implications of those things not being part of what you mean by "helping others." Do this now, and use the next page to add to your list.

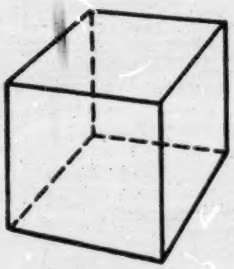
REEXAMINATION OF ORIGINAL HYPOTHETICAL SITUATIONS:

WHEN YOU HAVE FINISHED THE REEXAMINATION, CONTINUE TO THE NEXT PAGE.

You might have found a few more dimensions by doing the fourth step, but of course there were fewer to find.



You have already identified a lot of dimensions that you have at this first level of breakdown.



Because the fifth and last step is the hardest, what I want you to do is, after I say the directions, just do it. Don't cognate over what it means to do it, just let it happen.

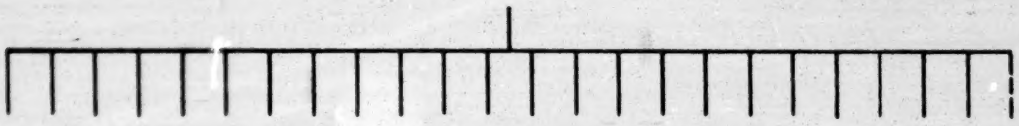
Here are the directions: I want you to think up dimensions that have nothing to do with "helping others," and then seriously examine whether or not they do.

RESULTS OF THE STEP:

WHEN YOU HAVE EXHAUSTED THIS PROCESS, CONTINUE TO THE NEXT PAGE.

Here is one way the step can work. Let us say, for example, I am a marriage counselor and a fellow comes who is having domestic problems at home. I have him operationalize what he means by "good father," and he goes through a positive hypothetical situation and a negative hypothetical situation and then sees some other people's lists. (Because I've been doing this for 20 years, I have a lot of them handy.) Then he goes back to the hypothetical situations and looks again at what is going on and examines whether or not the things that are going on really have anything to do with "good father." So for about an hour or more he has been immersed in this fuzzy concept. Then I ask "All right, what has nothing to do with it?" and he replies, "How much time I spend at home." People <u>don't</u> think up things that have nothing to do with their concept when you ask them to. Of course, if you cognated over it long enough, you would think of the pyramids of Egypt or the dark side of the moon. But if you just let it happen, what would you get? You would get things that really <u>are</u> related, as a result of the mind-freeing twist of the question, "What has nothing to do with it?" It may be something, in the case of counseling, that is a repressed dimension. It may be, in other cases, things that might be considered frivolous. The frivolous things come up, and you can examine them seriously. You see, one of the things that we mean in Western thought by "ridiculous" is "don't think about it," and my suggestion is that's dangerous. We have to think about such things. The greater our tendency is to label something ridiculous, probably the more important it is to consider it very seriously, because it is within that area that we are not utilizing our thought, not giving it careful consideration.

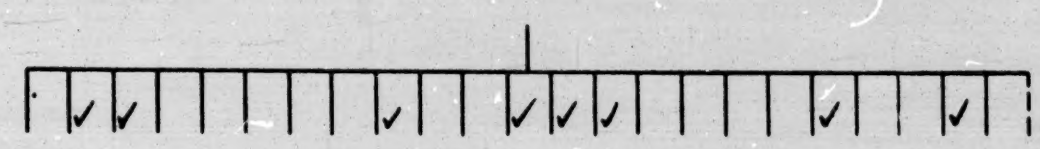
By this last step, you may have identified some more dimensions and all I will ever claim is that at the very best, doing the whole procedure carefully



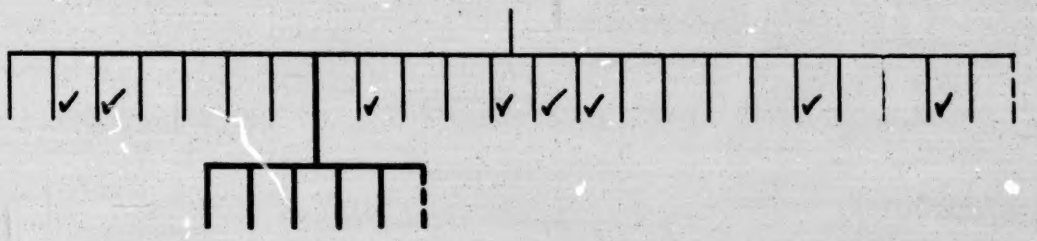
and exhausting each step, you will get a very good approximation to the number of dimensions that <u>you</u> have, what <u>you</u> mean when you use the term "helping others."

Now the next thing to do is to go back to the first item on the first line and look at it — the very first item on the first list. And ask yourself the following question, "Is this either a directly observable behavior or a directly observable state?" Another way to approach it is to ask, "If I said this

dimension to someone else and told him 'Go over in that room and tell me if this



thing is happening,' would he come back with the same information that I would get if I went myself?" If the answers to these questions are "No," then that item is a fuzzy concept. What you would then do is take that fuzzy concept and



go through the same sequence of five steps to break it down. Usually at the very first level of breakdown for a very fuzzy concept, there will be very few dimensions that are directly observable behaviors or states. However, as you go down the structure, you will gradually get a higher and higher percentage of directly observable behaviors or states until, if you operationalize all of it, you will have a very long, very comprehensive, very complete approximation to the total number of specific behavioral events and states that <u>you</u> mean when you use this term.

Now someone is going to say, "That takes an awful lot of time," or "It's awfully complex." Well, it is YOUR fuzzy concept. If the process is complex, that is because your concept is complex. If your concept is simple, so will this be.

Another possibility is that one may find the original fuzzy concept cropping up again a couple of layers down; nothing ever gets down to observability. Well, that may be because the person has no reality base for the concept that he is using. For instance, if I gave you a fuzzy concept that you had never used, don't use, and that isn't meaningful to you, you would probably be able to go through the process for a while but you would never come down to earth because it is a whurr of verbiage, a whurr of fuzz. It never would touch down to

reality because you would have no reality referents that are meaningful to you in terms of that fuzzy concept.

Now, go back to the first item on the first list and ask yourself, "Is this a directly observable behavior or state? If I sent someone to find out if this thing were happening, would he come back with the same information that I would get if I went myself?" If the answer is "No" to either question, then you have a fuzzy concept which needs to be broken down further. And so on for the other items on your list. For each item that is still fuzzy, repeat the five-step procedure to get to the second level of breakdown. Do one now, and you can use the next page to begin the procedure.

BEGIN THE PROCEDURE FOR THE SECOND LEVEL OF BREAKDOWN:

If after completing the procedure at the second level of breakdown, you find you still have some dimensions that are not directly observable behaviors or states, then repeat the procedure again with them. At this third level, you may not need to check with other persons (Step 3).

You have completed this instructional module. Please follow this advice:

> If you wish to have someone else use this procedure, please do not just describe it to them; have them actually go through the process. A negative reaction can occur when a person only hears the steps described without actually experiencing them.